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PRE-SERVICE TEACHER PERCEPTIONS OF PRONUNCIATION TEACHING:

A QUALITATIVE INVESTIGATION

by

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B.A. University of Florida, 2018

A thesis submitted in partial fulfillment of the requirements
for the degree of Master of Arts
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ABSTRACT

Pronunciation teaching has long been overlooked in areas of research, especially those of language teacher cognition (Couper, 2017; Macdonald, 2002). In language teacher education, narrative inquiry provides a basis for expert mediation and growth in perceived areas of challenge (Johnson, 2009; Johnson & Golombek, 2002) through the lens of language teacher cognition (Baker & Murphy, 2011). Through tracking reflections of pre-service teachers who observed a pronunciation course led by an experienced English teacher, this study examines a secondary data set of narrative reflections in correspondence with an observed pronunciation course. The results are organized into themes and subthemes which highlight salient foci of the data. Through language teacher cognition, the findings highlight areas of knowledge and potential growth in pronunciation pedagogy that can be harnessed by language teacher educators for personal and professional development in language teacher education.

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LIST OF ABBREVIATIONS

EL	English Learner
ELT	English Language Teaching
ESL	English as a Second Language
IRB	Institutional Review Board
L1	First/Native Language
L2	Second/Foreign Language
LTC	Language Teacher Cognition
NS	Native Speaker
NNS	Non-native Speaker
PAE	Pronouncing American English
SAE	Standard American English
SLA	Second Language Acquisition
SLTE	Second Language Teacher Education
TEFL	Teaching English as a Foreign Language
TESOL	Teaching English to Speakers of Other Languages

CHAPTER ONE: INTRODUCTION

In spite of years spent studying a second or foreign language, the bulk of language learners today still struggle with second language (L2) phonology (Derwing & Rossiter, 2002). Language learners identify a strong desire to learn pronunciation; however, a small percentage of learners receive any sort of formal pronunciation training in the course of their language learning endeavors (Derwing & Rossiter, 2002). Resulting in self-perceived struggles with phonology and pronunciation when performing in their L2, the lack of confidence in pronunciation can lead to frustration (Macdonald, 2002), communication breakdowns (Jenkins 2002), avoidance (Derwing & Rossiter, 2002) and even questioning of self-identity in the L2 (Levis, 2005). Over the course of time, Celce-Murcia, Brinton, and Goodwin (2010) assert that Western history itself has shaped to the focus of language to be grammar- and vocabulary-centric. Therefore, it is not surprising that the modern-day language classroom is left in a state of general neglect when it comes to pronunciation teaching and learning.

Paralleling the previously outlined frustrations towards pronunciation on the learner's end, second language instructors also report frustration (Ross 1992), a lack of adequate phonological knowledge (Burgess & Spencer, 2000), and a sense of mystification (Ross 1992) when it comes to teaching pronunciation. The reluctance of language teachers to engage in pronunciation teaching in their classrooms remains pervasive (Macdonald, 2002) in spite of an accumulation of research calling for more thoughtful and meaningful pronunciation pedagogy. The culmination of these attitudes, Couper (2017) finds, most frequently leads to the overt omission of pronunciation instruction in English as a second language (ESL) and English as a foreign language classrooms. This is in part due to language teachers who feel underprepared

and unconfident in this area of teaching, heightened by the demand of language learners who view this area as essential.

Based on this critical problem in L2 instruction, the current study examines the gap in teacher preparation by examining it at its origin within language-teacher training programs. The questions of which experiences, or lack of experiences, pre-service teachers obtain throughout their training may lead to answers for resolution of this rejected status of pronunciation within the L2 classroom.

Language teacher cognition (LTC) research was selected for this research inquiry because of its exhaustive nature which allows for comprehensive insight into the minds of language teachers. Broadly, LTC is defined by Borg (2003) as, “what teachers know, believe, and think” (p. 81) in relation to their work although this definition has been expanded upon in more recent years to include the emotional lives of teachers as well (Borg, 2019; Golombek & Doran, 2014). Viewing language teaching as a solely intellectual, cognitivist activity ignores the emotional dimension and emotional labor of individuality which contributes to the profession (Golombek & Doran, 2014). By using LTC to account for both intellect and emotion, research in teaching takes on a much more balanced angle.

LTC also encompasses a way of researching what second language teachers know, how they have come to know it, and how they utilize this knowledge in the language classroom (Bailey, Bergthold, Braunstein, Fleischman, Tuman, Waissbluth, & Zambo, 1996; Baker & Murphy, 2011; Johnson, 2009). Furthermore, while there are some studies which connect LTC research to areas of pronunciation teaching research, there are few studies of this intersection especially when compared to other areas of instruction, such as grammar and writing (Baker,

2011; Baker & Murphy, 2011; Buss, 2016). The present study addresses this gap in the literature, contributing to the ever-expanding body of literature incorporating LTC research into pedagogical practice and situating itself at the intersection of LTC, second language teacher education (SLTE), and pronunciation.

Outline of the Problem

As interest in LTC began to increase in the last couple of decades, a gap in the overlap of LTC research and the domain of L2 pronunciation instruction surfaced (Baker & Murphy, 2011). While not a new phenomenon, the disconnect between learners' self-expressed need for pronunciation instruction and lack of language teacher preparation for pronunciation teaching pervades all levels of practice and research (Derwing & Rossiter, 2002; Derwing & Munro, 2005; Buss, 2016; Macdonald, 2002; Burns, 2006; Levis, 2005). The lack of teacher training in degree or certificate programs may also contribute to this gap. Because of the holistic and transformative lens which it offers, LTC may prove an optimal vantage point for understanding the same thoughts and factors in the minds of pre-service teachers and for transforming teacher-training approaches to include pronunciation pedagogy.

Two main theoretical principles guided the theoretical stance taken in this study. In a seminal work, Lortie (1975) presented the often-cited concept of the *apprenticeship of observation*, referring to the culmination of learning experiences, classroom hours, and prior knowledge which pre-service teachers bring into their new teaching positions. In this apprenticeship, pre-service teachers engage in “learning-while-doing” while still under the supervision of an experienced professional who is able to mediate any potential instructional

challenges (Lortie, 1975, p. 60). The observations which pre-service teachers experience through their coursework requirements undoubtedly contribute to this apprenticeship in a careful and guided manner. Observational experiences in the pronunciation classroom guided the present study in order to discern if a distinct or traceable shift in pre-service language teacher thinking and teaching practices towards pronunciation would occur.

Another vital construct to understanding teacher-learner development is the notion of investigating reflection as a scaffolding mechanism throughout the learning process (Johnson 2009; Farrell, 2007). Through the externalization of their thoughts, experiences, and opinions, pre-service teachers “organize, articulate, and communicate what they know and believe about teaching and who they have become as teachers” (Johnson & Golombek, 2002, p. 7). This reflective process provides holistic support to the pre-service teachers’ beliefs about their own growth as educators of second language pronunciation. By means of careful examination of the pre-service teacher evolution as it occurs throughout this semester, further consideration may be required from Teaching English as a Foreign Language (TEFL) and Teaching English to Speakers of Other Languages (TESOL) programs in order to best prepare pre-service teachers for the demands they will surely encounter in their future careers.

The research question, therefore, is framed through the goals of discovering 1) what ideas or assumptions pre-service teachers hold towards pronunciation teaching, 2) what they believe about pronunciation learners and learning, and 3) how language teacher preparation curricula influence English language teaching (ELT) competencies for pronunciation teaching.

Research Question

This thesis examines the beliefs of pre-service teachers towards pronunciation teaching and learning and the impact of pronunciation course observation on said beliefs. Looking to explore potential themes and beliefs of pre-service teachers lends to creating space for future teacher development and growth (Kubanyiova, 2012). Therefore, through a mixed-modality narrative inquiry approach, the following question was developed to investigate the constructs discussed in the introduction. The question, therefore, asks open-endedly *how* pre-service teacher perceptions of pronunciation evolve and are impacted by the opportunity to observe a pronunciation course? Through the lens of narrative inquiry, the researcher examined the themes which arose from exploring pre-service teacher narratives in both written and spoken form detailing the perceptions of pre-service teachers towards pronunciation teaching and learning.

This study consisted of the analysis of existing data obtained from the Center of Language Outreach, Research, and Study (COLORS), a language repository housed in a large, public, post-secondary institution in the southeast United States, hereafter referred to as “Repository”. In accordance with Institutional Review Board protocol, the Repository collects and stores artifacts of English language classroom discourse through its language outreach services. Through COLORS outreach, pre-service teachers are situated in various ESL contexts both in the university and the local community as part of language teacher preparation. All teacher artifacts produced from these linguistic exchanges are stored as data within the Repository. Hence, the Repository’s data set incorporates pre-service teacher, English learner, and teacher-educator interactions. By requesting access to the Repository data pertaining to one

session of a pronunciation course, the researcher examined a secondary data set comprised of pre-service English language teacher reflections in order to address the research question.

CHAPTER TWO: REVIEW OF THE LITERATURE

The theoretical framework of LTC in pronunciation teacher education is grounded in two perspectives. The first of these discusses the trajectory of teacher cognition research and the contributions made to SLTE, situating the notion of language teacher cognition in terms of pronunciation teaching specifically from the standpoint of the pre-service teacher population. The second section looks more closely at salient findings in the sub-area of teacher cognition relating to pronunciation teaching research and pronunciation learning.

SLTE, as any kind of teacher preparation program, has a responsibility to take a methodological approach which considers its students “learners of teaching” (Johnson, 2009, p. 3). Furthermore, teacher education is not limited to classroom interactions. Teacher education also serves to describe the ongoing evolution in which any educator engages in through their accumulation of professional training, knowledge, and classroom experience (Freeman & Johnson, 1998). Historically, SLTE draws from theoretical research into how individuals learn a language and how to prepare teachers to be experts in this theoretical arena (Johnson, 2009, p. 11). Johnson (2009) claims that this “translation” (p. 11) of the theories of second language acquisition (SLA) fails in practical application in teacher-learning environments. These translation methods, outlined by Johnson (2009), have fallen out of popularity in the recent literature because of their failure to encompass what is needed in the shifting landscape of modern language classrooms. As a result, ELT professionals and researchers have begun to turn to LTC and social perspectives to encompass enhanced views of individual teacher strengths which can be drawn upon in the L2 classroom.

The theoretical framework of this study scaffolds three perspectives of LTC in pronunciation teacher education. As a result of LTC research, a more socially-aware, culturally-sensitive approach to language pedagogy and teacher-enacted practices has emerged and replaced the theory-to-practice models. A brief look at the history and working definitions within LTC research, specifically within SLTE, reveals salient features for examining the context of pronunciation teaching and learning, along with implications for applying LTC research within pronunciation instruction for teacher-educators, language teacher education programs, and pre-service teachers alike. Following the definitions and learning contexts, the standpoint of both teacher versus student perspectives of pronunciation teaching and learning are discussed.

Language Teacher Cognition

Moving away from the content-heavy, unidirectional classrooms influenced by various *en vogue* methodologies, a new branch of research began to emerge in the mid-1970s. This research was blanketed by the term LTC and began to view teachers as holistic, thoughtful creatures whose decisions were not just based on content and subject knowledge (Ball, 2000; Borg, 2003; Johnson, 2009), but also by the ways in which teachers socially construct their sum of experiences, knowledge, and pedagogical skills and how individual teachers manifest these various factors in their teaching practice. At its core, LTC seeks to answer questions pertaining to what teachers think about, how those thoughts develop, and connect how those thoughts interact with teacher learning and classroom practice (Borg, 2003). LTC research recognizes that the professional and personal lives of teachers in particular are closely intertwined and impacted by each other in that teaching combines both the public activity of classroom engagement and

private mental work put into thinking, planning, and prepping classes (Burns, Freeman, & Edwards, 2015).

Up until the ontological shift introduced by LTC into SLTE research, the role of language teachers had been viewed as merely a “peripheral component in language teaching research” (Woods, 1996, p. 2). However, LTC allowed for an integrated approach to viewing who language teachers are, how they think, and why they do what they do (Burns, Freeman, & Edwards, 2015). This theoretical approach posits that past experiences, personal values, and beliefs of individual educators are inextricable from the way that they teach (Freeman & Johnson, 1998).

Another factor contributing to the rise in popularity of LTC research is the fact that it has allowed researchers to “study how teachers’ attitudes about language influenced their instructional choices” (Borg, 2019, p. 2). LTC research acknowledges that every teacher has been, to some extent, a student themselves. Taking these idiosyncratic teacher-learning experiences into consideration, LTC claims that the sum of a teacher’s past experiences manifests in their individual pedagogical practices. By studying the underlying claims, beliefs, and motivations of teachers, instructional decisions can be explained, refined, and reproduced more effectively. Therefore, research in LTC yields two-fold results; not only does it provide researchers and teacher-educators with a knowledge base with which to alter future pedagogical approaches, but it also allows teachers to utilize their past experiences as meaning-making tools which contribute to classroom practice.

This emphasis of LTC research within SLTE continues to empower teachers beyond the basic tenants of acquiring sufficient content knowledge for language instruction. Within LTC,

approaches to teacher-learning change from purely theoretical, knowledge-based programs to views of learning which include the “interaction of knowledge and beliefs about oneself as a teacher, of the content to be taught, of one’s students, and of classroom life” (Freeman & Johnson, 1998, p. 401). Kubanyiova and Feryok (2015) posit that LTC research enables language teachers to develop as “active thinking and feeling agents in their own development and in the educational process” (p. 437). This sense of agency in language teaching provides language teachers with a means for developing deeper connections between course content, the learners, and the communities within which various courses are embedded.

Knowledge in Language Teacher Education

Johnson (1996) presents a distinction between two types of knowledge that interplay in SLTE: conceptual knowledge and perceptual knowledge. While conceptual knowledge taps into theory, Johnson argues that equally important to second language classrooms is the ability of the instructor to access perceptual knowledge, pragmatic judgments which adapt to each individual classroom environment. Woods (1996) presents the same distinction between types of knowledge, labeling them as declarative, or content knowledge and procedural knowledge. Distinguishing between what a teacher knows and how they teach what they know posits a more nuanced approach to SLTE in that it is not enough to present pre-service teachers with knowledge about teaching; they must be taught a sensitivity for how to teach the content clearly.

Using LTC approaches to examine the development of pre-service teachers is a valuable resource because “part of the promise of LTC research is the effect it can have on prospective teachers’ professional development as well as in expanding the awareness and expertise of

inservice teachers” (Baker & Murphy, 2011, p. 30). Ultimately, LTC is rooted in social contexts, and the key to discovering links between pre-service teacher beliefs and their future pedagogical practices can be found in the SLTE programs which pre-service teachers study. Johnson (2009) suggested a connection to understanding pre-service teachers’ pedagogical development that may be found by observing the interactions between pre-service teachers’ knowledge and beliefs, stating that,

The normative ways of acting and interacting and the values, assumptions, and attitudes that are embedded in the classrooms where teachers were once students, in the teacher education programs where they receive their professional credentialing, and in the schools where they work, shape the complex ways in which they come to think about themselves, their students, the activities of L2 teaching, and the L2 teaching-learning process. (p. 17)

Teacher education programs, therefore, offer a unique way to access and mold the foundation of LTC. By utilizing LTC research in SLTE, researchers and practitioners have a means for discovering the initial, pre-training knowledge and beliefs of pre-service teachers are. Furthermore, this research also yields the unique vantage point of being able to shape and develop pre-service teacher cognition as an objective of improving pedagogical practices.

Another goal of SLTE is to provide pre-service teachers with the ability to link what they find in research and texts to the needs of any given group of learners with which they find themselves working with (Freeman & Richards, 1993; as cited in Macdonald et al. 2001). This activation of procedural knowledge is a necessary skill for pre-service teachers so that they can make links between content knowledge and the demands of teaching their own learners.

Situating general knowledge into specific learner contexts is a crucial objective of pronunciation teaching. By highlighting the importance of content included in teacher education programs and how LTC further impacts pedagogy, researchers and teacher-educators can work together more effectively to incorporate knowledge about pronunciation instruction into teacher education programs in order to produce more confident, research-focused, and pragmatic pronunciation teachers for the field of ELT.

Language Teacher Cognition in Teacher Education

Because it seems that “we teach as we have been taught” (Bailey et. al., 1996), it is of the utmost importance to understand the preconceptions of pre-service teachers in pronunciation teaching and how pre-service teachers come to learn pronunciation teaching. In Borg’s 2003 review of the literature on language teacher cognition, there were not yet any studies which examined the links between LTC and pronunciation teaching, and in the years since this comprehensive review, very few studies have attempted to link pronunciation and LTC, especially upon comparison to other areas in focus, such as grammar and writing instruction (Baker, 2011; Baker & Murphy, 2011; Buss, 2016). Therefore, direct implications for what to include in pronunciation instruction and teacher education could be drawn from more specialized research within pronunciation classrooms.

While the discrepancy between the amount of research done of language skill areas versus that done of pronunciation teaching and learning has been noted in the literature (Derwing & Munro, 2005), Baker and Murphy (2011) make a call for further teacher education research within the specific area of second language pronunciation. Although Lortie’s (1975)

apprenticeship principles that “[teaching] is unusual in that those who decide to enter it have had exceptional opportunity to observe members of the occupation at work” (p. 65), with pronunciation teaching it seems this is not likely the case. In fact, Baker and Murphy (2011) especially noted the lack of LTC studies of pronunciation teaching, and they asserted that pronunciation teaching resources and education for pre-service and in-service teachers would be “greatly enhanced” (p. 38) by more classroom-based research specifically within the pronunciation teaching context because LTC research effectively connects beliefs and practices of both students and teachers. Derwing and Munro (2005) furthermore warned about the reliance of pronunciation instruction and materials on “intuitive notions” (p. 380), reinforcing the fallacious assumption that a native-speaker intuition of what is “correct” is enough knowledge to effectively teach learners about pronunciation. Because stated beliefs of teachers and their actual classroom practices do not always align (Johnson, 1992), using LTC to evaluate the position of pre-service teachers can be used to highlight some of these gaps in a preventive manner and inform teacher education courses about areas which may need refining as pre-service teachers develop pedagogical competencies.

Primarily, the responsibility of teacher-educators in the development of pronunciation teaching must be addressed by the findings of LTC in pre-service teachers. Freeman and Johnson (1998) argue that “...we as teacher-educators must begin with the activity of language teaching and learning; the school and classroom contexts in which it is practiced, and the experience, knowledge, and beliefs of the teacher as a participant” (p. 413). As noted previously, there are very few studies to date which examine LTC in pronunciation teaching and even fewer which take into consideration process of how pre-service teachers learn to teach pronunciation. An

investigation into the development of pre-service teacher beliefs as they undergo learning experiences in a pronunciation class will produce training programs that can focus on both content knowledge and pedagogical skillsets. Thus, this study will serve to inform teacher-educators regarding which individual attitudes, experiences, and beliefs can and should be addressed in the coursework presented to TEFL and TESOL English learners (ELs).

Language Teacher Cognition in Pronunciation

As LTC “seeks not only to describe what teachers know, believe, and so on but also to understand the influence of such unseen factors on what teachers do and how they develop” (Borg, 2019, p. 2), it seems a fitting area to include in teacher preparation programs, which provide professional development while also informing researchers of the ways in which pre-service teachers actualize their skill sets. The information yielded by LTC in the context of L2 pronunciation studies is useful for both in-service teacher development and for the shaping of teacher education programs with specific regards to what and how pronunciation is presented to pre-service teachers (Buss, 2016). Kiely and Askham (2012) noted that teacher learning “...is developed in the teacher training programme through intense, iterated cycles of input, observation, performance, and feedback, and through interactions with teacher educators they admire” (p. 498). By taking an LTC approach to pronunciation teacher preparation, pre-service teachers can benefit from not only awareness raising in the hands of skilled professionals which sheds light on concepts otherwise unnoticed but also the value of narrative reflection of practice-teaching experiences (Freeman & Johnson, 1998; Johnson & Golombek, 2011).

Pronunciation Teaching and Learning

Views on what is required of pronunciation teaching have evolved in the last two to three decades. While teaching approaches, such as audiolingualism and the reformed method, view pronunciation as paramount to language learning, other more recent approaches, such as the cognitive movement and early versions of communicative language teaching, disregard pronunciation altogether (Celce-Murcia, Brinton, & Goodwin, 2017). Along with Murphy (1991), Derwing and Munro (2005) note that, although research argues that a more integrated, realistic approach to setting pronunciation goals should be incorporated into the L2 educational context, most reliable teacher texts and materials give little to no attention to pronunciation teaching. In classes where pronunciation is integrated, Foote et. al. (2011) discovered that only 6% of class time went towards pronunciation instruction when compared to other content areas. Further, the classes which did include pronunciation instruction ignored research-based approaches to pronunciation teaching and learning opted for an approach based predominantly on native-speaker intuition (Foote et. al. 20011). Therefore, it becomes critical to question what areas are worth focusing on in modern-day pronunciation teaching according to current theoretical views.

Teachers' Stated Views of Pronunciation Teaching

The skill area of pronunciation carries a reputation within ELT of being somewhat marginalized and often avoided by in-service ESL teachers (Derwing & Munro, 2005; Macdonald, 2002). In-service language teachers reported a lack of confidence in teaching pronunciation in general (Macdonald, 2002) and especially when dealing with suprasegmental

elements of pronunciation (Baker, 2011; Buss, 2016). In fact, Derwing and Munro (2005) challenged the tendency to disvalue pronunciation skills in teacher education by stating that: “[Teacher] preparation programs should provide ESL teachers with sufficient background to enable them to assess their students’ pronunciation problems and to critically evaluate research findings, materials, and techniques to determine their applicability for their students” (p. 392).

Multiple studies show that teachers view pronunciation as a very important component of language learning and teaching, but their ability and willingness to teach pronunciation does not match the importance with which they rank it (Buss, 2016). This incongruence is mirrored by a lack of preparation in teacher education programs (Murphy, 1997) and guidance from experienced pronunciation instructors (Derwing & Munro, 2005). Further, ELT professionals are also faced with the challenge of meeting the wants and needs of language learners, which adds a new social dimension to the wide range of factors already under consideration in the teaching of pronunciation.

In a study done by Breitzkreutz, Derwing, and Rossiter (2002), it was found that only 30% of instructors across 67 different ESL programs in Canada had received any pronunciation-specific training in their education. The majority of these surveyed instructors reported a desire for more professional development opportunities. Not limited to North American contexts, Burgess and Spencer (2000) highlighted a need for further pronunciation instruction for pre- and in-service teachers as well. In looking at *how* to support the development of pronunciation instruction in pre-service teachers, Ross (1992) identified five areas which current instructors find difficult to teach:

1. the selection of features of pronunciation

2. the ordering of the features selected
3. the type(s) of discourse in which to practice pronunciation
4. the choice of methods which will provide the most effective results; and
5. the amount of detail needed for different stages of instruction

Macdonald (2002) noted different reluctancies of teachers to teach pronunciation in the context of Australian schools. Interviewing eight ESL teachers, Macdonald found that all eight participants demonstrated frustration and negative emotions at some point when teaching pronunciation. Couper (2017) noted a similar lack of confidence in teachers' knowledge of phonological aspects, leading to the omission of pronunciation in second language classrooms in Australian ESL classrooms.

While what teachers need to know in order to be effective pronunciation instructors is relatively well-researched and defined, the actual education and practice of teachers is not so clear cut (Derwing & Rossiter, 2002). In cases of teachers who had received some variation of instruction in pronunciation, teachers still reported feeling "frustrated" and "mystified" (Ross, 1992) by phonological terminology and pedagogy. Language teachers also claimed ignorance in knowledge of phonology and prosody, while recognizing that there is a demand for pronunciation instruction from their learners (Burgess & Spencer, 2000).

While an integrated approach to pronunciation teaching has been put forward by current research as an effective teaching model, it seems that the lack of pronunciation instruction available to language teachers in their educational lives leaves them lacking in the content and subject knowledge necessary to carry out such an approach in their classroom. For example, in spite of research suggesting that there is little notable impact to pronunciation comprehension

from teaching the segmental units of language (Elliott, 1997), teachers self-report as being most comfortable when teaching this area and, therefore, teach segmental units much more frequently than suprasegmentals (Murphy 1997). This contradiction is further exacerbated by research which argues that suprasegmentals are more important to teach, stating that features such as rhythm, intonation, and stress contribute more to mutual intelligibility than the phonetic segments themselves (Baker, 2011; Levis, 2005). In an attempt to bridge both sides of this debate, Celce-Murcia et. al. (2010) emphasized the dichotomy of 1) the importance of prosody against the 2) lack of focus on these areas of phonology in the teaching of pronunciation, while still calling for balance in pedagogical approaches, stating that modern pronunciation teaching should seek “to identify the most important aspects of both the suprasegmentals and segmentals and integrate them appropriately in courses that meet the needs of any given group of learners” (p. 11).

Further bridging the theoretical divide, Levis (2002) and Jenkins (2002) continue the proposition of an informed approach to segments and suprasegmentals, bringing to attention a focus on features which tend to impede mutual intelligibility. These units of pronunciation are met with varying attitudes regarding what is important, with goals of ELs commonly being to sound like a native speaker (NS), while research argues for a more realistic target of comprehensibility (Baker, 2011; Derwing & Munro, 2005; Derwing & Rossiter, 2002). Derwing et al. (1998) define comprehensibility as “how difficult it is to understand an L2 speech production” (p. 396), calling for a focus on reducing difficulty in comprehension instead of focusing on sounding native-like. This methodological divide between the nativeness principle and the intelligibility principle, set forth by Levis (2005), suggests that teachers may need more

training in both segmental and prosodic units of pronunciation in order to make effective pedagogical decision for what parts of pronunciation their learners need.

Therefore, the overarching theme from studies which examine LTC within pronunciation teaching is that language teachers are not confident in their own knowledge of pronunciation, both declarative and procedural, and consequently omit pronunciation instruction from their classes (Baker, 2011; Couper, 2017; Murphy, 2014). Additionally, Baker and Murphy (2011) state that the sum of teacher knowledge about curriculum, phonological content, and learners should be integrated in the area of pronunciation teaching and research as in other content areas. These findings result in a call for more access to professional development, pronunciation instruction in teacher education programs, and accessible teaching materials which integrate pronunciation instruction into everyday language classroom practice.

While this section has examined the areas in which in-service language teachers perceive a need for training in pronunciation, it is not enough to look at what instructors think they need training in. In fact, training in less instinctual areas of pronunciation teaching, such as comprehensibility, integrated practice which values both segmental and prosodic elements of speech, and an avoidance of the nativeness principle, will be imperative to continuing the professional development of current language instructors and future language teachers alike.

Learners' Stated Views of Pronunciation Learning

As already noted above, one of the most important roles of the pronunciation teacher is to distinguish between the desired goals of the learner and more achievable goals that can be met from pronunciation instruction (Derwing & Rossiter, 2002). Contrary to what is deemed realistic

by other pronunciation research, Derwing (2003) found that 95% of the language learners studied set native-like speech as their pronunciation goal, which is contradicted by 60% of the same sample who claimed not feeling discriminated against because of their accent. While learners may carry various factors, including motivation (Derwing & Munro, 2005), age (Levis 2005), and language learning setting and aptitude (Derwing & Munro, 2005) into the language classroom, which all affect the extent to which an accent may be “reduced”, it seems that the goal of pronunciation learning should be focused on what will result in the smoothest possible communication (Jenkins, 2002; Levis, 2005).

From this historical, pedagogical, and practical overview of LTC and pronunciation teaching and learning, it can be seen that there is a vital need for more research in the overlap of these fields of study (Baker, 2011; Macdonald, 2002). In order to provide learners with the pronunciation instruction they crave and teachers with the training necessary for providing this instruction, more sensitive education may be needed within SLTE and at the level of professional development. By harnessing the practical, situated lens of LTC, which values the position of every individual language instructor, pronunciation may become a more accessible, tangible area of growth in all areas of SLA.

CHAPTER THREE: METHODOLOGY

This research examines the relationship between pre-service teacher perceptions of pronunciation teaching and the impact of exposure to a formal pronunciation course. The following sections describe both the general study design, along with the population and data features. Integrated into the description of the methodology is the outline of the proposal of the study which was submitted to the Institutional Review Board (IRB) as well as a summary of the data released by the COLORS Repository.

Study Design

The scope of this study has been designed to allow for “a conceptual understanding of processes occurring in the particular context” being observed (Kubanyiova, 2012, p. 66). While LTC carries undeniable importance in the field of SLTE, it has already been noted that researchers and teachers alike have much more to learn about the implications in practical application for the body of LTC research (Kubanyiova & Feryok, 2015). Therefore, this study examines pre-service teacher cognitions with regard to pronunciation teaching and learning through a situated, contextualized lens in the hope of informing language teacher education practices. The current project aims to make both conceptual and practical contributions to the community where the initial study took place and the greater field of SLTE as a whole.

The process of securing the Repository data used in this research project involved multiple stages. The initial step in this process consisted of meeting with the Repository administration to determine which data might support the research question of the present study. Secondly, the researcher submitted an application to the IRB of the host institution, describing

the parameters of the study. Once IRB approval was secured, as documented in Appendix A, the researcher submitted a completed COLORS Repository Request Form to the Repository administration, soliciting for the data for the study, and signed a Repository Data Sharing Agreement, agreeing to conditions relative to the use of data from the Repository. Once these steps were completed, the Repository issued the data set requested via a secure folder in the institution's cloud system.

Population

The group of participants in this study consisted of undergraduate and graduate pre-service teachers enrolled in TEFL/TESOL programs of study. These participants self-elected to participate in a pronunciation practicum experience as part of a service-learning course requirement. In addition, the demographic data obtained revealed the nature and degree of previous ELT experience each participant had at the onset of the pronunciation practicum experience. It was unclear from Repository descriptors if the participants had ever before received individualized pronunciation training in English pronunciation, leaving uncertainty towards the previous knowledge that was carried by individuals into the course. No recruitment was employed for this project since participant data was obtained through the Repository.

The Researcher

The researcher's background inevitably impacts the way in which the data in this research is analyzed, interpreted, and presented, especially in the case of the qualitative data (Duff & Uchida, 1997; Larsen-Freeman & Cameron, 2008). It is worth noting that this angle is not a drawback to the present study design but rather a statement of fact about the presentation of

qualitative or mixed-methods research (Larsen-Freeman & Cameron, 2008). Because the data was received from the Repository after its collection, thus constituting secondary data, the researcher did not interact or follow-up with any of the participants involved in the course. Through the use of secondary data, the researcher established a hands-off position with the population in question in order to maintain a sufficient distance from which to observe the data best. The researcher was a second-year graduate TESOL student with interests in SLTE, L2 pronunciation, and sociocultural perspectives on learning. Based on research in these three areas, the present thesis was developed and executed.

Practicum Description

The Repository reported the practicum as a ten-week long, pronunciation-teaching experience observed by undergraduate and graduate TESOL pre-service teachers. The course, entitled “Pronouncing American English” (PAE), served as outreach provided to ELs and was led by a TESOL faculty at the host institution, hereafter referred to hereafter as the “Mentor”. The Repository further described the English learner population receiving the pronunciation outreach as non-native English users from the local area with a variety of native language (L1) backgrounds and a wide range of proficiency levels. The Mentor was described by the Repository as an experienced TESOL professional and specialized in L2 pronunciation teaching and learning.

This pronunciation course consisted of a service-learning project fulfilling course requirements for the participants. Service-learning experiences were required of both undergraduate and graduate students as part of their coursework at the host university. In this

specific service-learning practicum experience, the practicum experiences offered to the pre-service teachers consisted of pre-service teachers observing pronunciation instruction given to ELs. In turn, the class served as an authentic learner population to the pre-service teacher observers, giving the student teachers an opportunity to observe and occasionally interact with pronunciation pedagogy. According to the Repository descriptors, the practicum focused solely on the pronunciation of Standard American English (SAE) and was taught by the Mentor.

The overall structure of the 10-week pronunciation course was based on segmental instruction and practice, targeting each week different segments of SAE. Each class meeting consisted of the Mentor's demonstration of the teaching of the specific segmentals and the application of individualized corrective feedback, both executed by the Mentor, which the pre-service teachers observed. In this portion of the lesson, the Mentor introduced specific sound segments and demonstrated articulatory features with illustration and contrast. The Mentor then also led whole-class choral repetition of sounds and words which incorporated the target sounds, calling on the whole class, small groups, or individuals to practice target concepts. This lecture demonstration was followed by controlled, small-group practice of the lesson concepts led by pre-service teachers under the guidance of the Mentor.

Data Set

The Repository issued to the researcher a qualitative data set consisting of three sub-sets of pre-service teacher data: 1) participant demographics, 2) summative, pre-service-teacher-written narratives of the pronunciation teaching and learning experience and 3) post-lesson, pre-service teacher audio reflections. The Repository also provided the researcher with a description

of the outreach service and of each data sub-set, detailing the conditions under which the data was gathered. The data set was reflexively analyzed, then interpreted, by the researcher in order to ascertain the degree to which pre-service teacher views had changed during exposure to a pronunciation training course and, thus, address the research question. The data set was released in a password-protected, secure file stored in the host institution’s secure cloud storage system. Table 1 depicts the modality and a brief description of each subset of data to be used in this study.

Table 1
Summary of Data Types

Type	Format	Description
Demographics	.xls	Participant details (e.g., gender, L1, program type)
Audio recordings	.mp3	Audio reflections gathered weekly immediately following every practicum session
Summative narratives	.pdf	Post-practicum reflections, regarding pre-service teachers’ views of the pronunciation practicum experience

The qualitative data gathered throughout the duration of the pronunciation practicum used two methods, thus supporting Dörnyei’s “saturation” of the data. Through thematic analysis, concepts which pertain to pre-service teacher cognitions about themselves as instructors and pronunciation teaching strategies were examined. The Repository had de-identified and coded the data by case number prior to releasing it to the researcher.

Participants

The data set reflected data on five participants who experienced the same practicum, service-learning project. The participant demographics data subset, as described by the Repository, contained information on the population, namely, pre-service teachers who took place in the practicum. This information included level of study, program of study, age, current location, and linguistic background. The information contained in this portion of the data helped to situate the responses and narratives included with the data set within their individual contexts. Table 2 serves to summarize the additional demographic data received from the Repository.

Table 2

Summary of Participant Demographics

Case	L1	Degree level	Degree program	Previous teaching experience
000153	English	Undergraduate	TEFL certificate	Has participated in conversational English courses and volunteered abroad with K-12
000171	English	Undergraduate	TEFL certificate	Has taught English to adult refugees, Costa Rican children, and high school Brazilian students
000189	English	Graduate	MA TESOL	Has taught English to young learners in Spain and Japan as well as adult learners in the U.S. at a language school
000297	Spanish	Undergraduate	TEFL certificate	No response given
000298	Creole/ English	Graduate	TEFL graduate certificate	No response given

Written Reflections

According to Johnson (2002), narrative reflection serves to integrate personal experiences into pre-service teacher observations, resulting in a tangible way to blend experience, story, and an expanding knowledge base into their own practices as educators (Johnson & Golombek, 2002). Through writing detailed reports of their experiences in each session, pre-service teachers provide another form of externalization explaining their responses in the post-lesson audio reflections.

The foundation of this study design was rooted in multi-modal narrative inquiry, with one of these modalities being that of written narrative reflection. In meetings with the Repository administrator, it was conveyed that pre-service teachers submit reflections at the end of the practicum as a means of detailing their summative experiences from participating in the pronunciation course. These written reflections allowed the data to be met through another modality of discourse and gave an overview of the participants' experiences throughout the course.

In the written deliverables, participants were asked to provide detailed assessment of specific learners in the course, to recommend further language study, and to reflect holistically on the overall experience in the pronunciation course. The written reflections also served as a point of comparison to the during-practicum weekly audio reflections by consolidating and supporting data that were gathered at different points over the ten-week period. The specific prompts which participants were asked to answer were as follows:

1. Give a general assessment of any EL(s) you observed and/or worked with during the PAE service-learning experience and recommendations for their future study.

2. Give a personal reflection of how theory connected to practice in the PAE service-learning experience.

A summary of the word count of each participants' response is shown in Table 3.

Table 3

Written Reflection Word Count per Prompt

Participant	Prompt 1 Word Count	Prompt 2 Word Count
000153	82	60
000171	412	445
000189	156	399
000297	119	244
000298	38	453

Once the data were received, the researcher began by examining the post-course written reflections to see which summative narratives seemed to best inform the research question. Participant selection ensued as part of this preliminary data analysis. As part of the initial discrimination of the written data, the narratives were reviewed both on the quality and quantity of written reflection, and through this lens an overall grasp at each participant's journey throughout the pronunciation course was established. Based on the quality of their summative reflections, participants who seemed most likely to contain thorough weekly audio reflections were consequently selected. Two participants, participants 000171 and 000189 in Table 3, were selected for this thesis and are referred to under the pseudonyms Kate and Ellie, from here forth, throughout the study.

Kate is an undergraduate student earning her certificate in TEFL. When prompted to write about previous teaching experiences, Kate shared about previous experience working with adult learners in an ESL context, K-12 learners in Costa Rica, and K-12 learners in Brazil. Ellie is a Master's level student studying TESOL. Ellie also detailed some previous teaching experience, citing experience with K-12 learners in both Japan and Spain as well as work at an intensive English program in the U.S.

Audio Reflections

In addition to the demographic data subset and the written narratives, the researcher included in the request to the Repository access to audio recorded data gathered from the population of pre-service teachers. It has been noted that reflection provides an effective way for new teachers to manage the effect of the apprenticeship of observation (Farrell, 2007) and that, “[through] reflection, new teachers become conscious of the particularities of their own classroom experience as students and develop strategies to avoid simply reproducing those practices” (Kiely & Askham, 2012, p. 501). By examining audio narrative data, the researcher aimed to be able to observe the microgenetic changes pre-service teachers experienced throughout the duration of the pronunciation service-learning project.

According to the Repository protocol, the narrative audio data collection happened weekly over the course of the practicum experience. Immediately following the pronunciation session, student teachers were asked to reflect upon the session. By externalizing this individualized narrative of a given lesson's information and events, pre-service teachers produced spontaneous and multidimensional data of their experiences during that particular

observation. Through this application of stimulated recall, the participants were provided a space for immediate reactions and observations from the day to be recorded (Murphy, 2014; Schön, 1983).

Data Analysis

Taking into consideration the qualitative nature of this project, the researcher perceived all of the data sub-sets as working together to inform each other. Therefore, each was not analyzed independently from the other, but rather what was found in one data set served to inform the analysis and interpretation of the others in order to achieve the most meaningful results; in other words, the qualitative data analysis was conducted reciprocally.

An investigation of the demographic data provided the foundation for analyzing the results of the audio reflection data and written reflection data. As the data set issued contained multiple sources of qualitative data, the researcher attempted an understanding of pre-service teachers within pronunciation instruction through LTC by first examining the written data sets holistically, reading only for comprehension of each participant's experience. The researcher then critically analyzed subsets of audio and written data provided by the Repository for overlapping themes, constructs, and ideas pertaining to the pre-service teachers' cognitions. Beliefs about pronunciation teaching, pedagogical techniques, pre-service teacher attitudes, and any shifts which may have occurred over the ten-week long period were also watched for in the data analysis.

A general outline of the process of analyzing the data went as follows. The first step was in listening thoroughly and transcribing the audio reflective data. Following the transcriptions, all

transcribed and previously written data sets were entered into the NVivo 12 software, which allowed the researcher to manually organize various excerpts from the data sets. Once nodes had been established, containing relevant pieces of data, the data within the nodes was further analyzed for salient themes which arose from the participant reflections.

Preliminary Data Analysis

In the initial analyses of the audio data from the selected participants Kate and Ellie, several steps were observed in order to maintain a systematic approach to the data. In a stage labeled *pre-coding* (Dörnyei, 2007; Kubanyiova, 2012), the reactive, weekly audio reflections were absorbed by the researcher. The duration, in minutes and seconds, and date of each audio reflection is organized in Table 4. During the initial *absorption* (Gu & Benson, 2015; Kubanyiova, 2012) of the audio reflections, the researcher merely listened through the weekly reflections in chronological order, thus familiarizing herself with the scope of each participant’s narrative.

Table 4
Audio Reflection Counter Values per Session

Participant	1	2	3	4	5	6	7
Kate	4’35”	3’33”	—	3’53”	5’13”	4’31”	—
Ellie	4’48”	3’45”	—	—	3’46”	4’23”	4’39”

In the second phase of pre-coding, additional listenings were applied to the same reflections in which the researcher undertook the transcription of the recordings. Each recording was transcribed in a secure Word document and labeled according to the corresponding date of the reflection and stored in the same folder. In addition, emphases on sounds in participant audio reflections were transcribed into IPA by the researcher to provide the reader with an idea of the emphasis expressed in the audio reflection. In the transcription, the researcher also included IPA transcriptions of instances where the participants emphasized phonetics to make a point. Transcribed audio data was then organized into emergent themes and patterns that served to address the research question, conducting a thematic analysis of the data received.

The third, and somewhat concurrent phase, of pre-coding entailed the familiarity with themes from the data. Simultaneously with the transcription process, notes were taken, and emergent themes were highlighted. In this manner, the researcher was familiar with the content and patterns contained in the reflections by the time the NVivo 12 Pro coding phase began.

Coding Description

The combination of the subsets of qualitative data provided a holistic lens to pre-service teacher experiences throughout the pronunciation practicum experience. It was believed that the analysis of the narrative data may reveal information about the pre-service teacher's personal teaching experience and account for growth or changes in cognition that may have taken place over the course of the experience. Thus, a thematic analysis approach was used when examining multimodal data subsets.

The researcher selected NVivo 12 Pro to conduct this thematic analysis as a method of looking for patterns and pre-service teacher microgenetic change on a weekly basis over the course of the data collection. Any relevant findings were sorted into nodes within the software which carried associated, formulaic meanings. Content related to the research question was continuously coded throughout the data analysis phase. As other relevant themes emerged in the data, new nodes were created and organized through the NVivo software.

After the transcription and analysis of the audio reflections, the written reflections were then returned to as a summative support to the findings revealed in the audio reflections. Pertinent phrases or ideas were again coded according to the themes which had been emerging in the audio data analysis. The written reflection data was thus organized into the same nodes with the transcribed audio data. If any additional themes arose in the written data, they were also documented. Therefore, the sources of qualitative data were analyzed in a reflexive manner so that each data source worked together to inform the proceeding analysis of the next. This reflexive uncovering of marked findings was anticipated and managed by the researcher as it arose in the analyses of the qualitative data.

CHAPTER FOUR: RESULTS

The following chapter explores the emergence of themes throughout the pronunciation practicum experience. Data from both the weekly audio reflections and the summative written reflections was used to trace the development of participant attitudes and perceptions. The manner in which the themes emerged from the data and the data supporting those claims is included in examining how participant views of pronunciation teaching and learning were shaped by their first-hand observation experience.

Emergence of Themes

The data analysis was a constantly evolving process through which the data, research question, theoretical underpinnings, and emergent themes were evaluated, re-interpreted, and reformulated (Gu & Benson, 2015; Kubanyiova, 2012). Because of the qualitative nature of the research question guiding this study, the themes were allowed to emerge from the data rather than be dictated by the purpose of answering the research question. The NVivo 12 Pro software was selected for this study as an effective software for highlighting themes and organizing qualitative data in a systematic manner. As themes appeared in the transcribed and written data, the “Node” feature in NVivo was utilized to organize the pre-observed themes, as well as notice new themes which were revealed by more thorough data analysis. Five nodes, with some sub-nodes, were identified in the data analysis and are depicted in Figure 1.

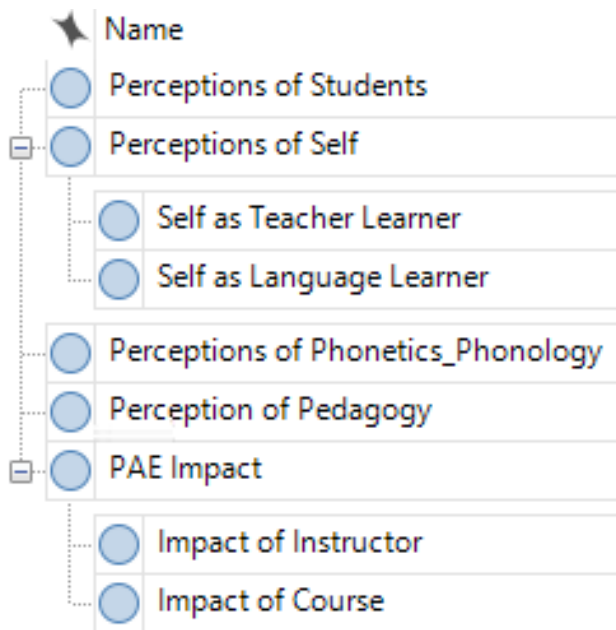


Figure 1: Summary of Emergent Themes

In the node entitled Perceptions of Students, the self-described reactions of the participants towards the ELs that participated in the pronunciation course were organized. This node included ideas about progress, perceived challenges, and learner attitudes towards pronunciation.

The next node, Perceptions of Self, led to two different sub-categories, which the researcher has labeled Self as Teacher Learner and Self as Language Learner. These two categories examined participant views of their own identity, both as developing language teachers and as language learners, revealed through certain observations and experiences within the reflection.

In the third node, Perceptions of Phonetics_Phonology, any references made to prosodic or segmental features of SAE were organized and included pre-conceived ideas towards SAE phonetics and phonology. The fourth node, labeled Perception of Pedagogy, contains participant attitudes and noteworthy mentions of the Mentor's technique or teaching methodology.

The fifth and final node, PAE Impact, is comprised of two sub-categories: Impact of Instructor and Impact of Course. As the opportunity to have exposure to formal pronunciation courses is limited at best for pre-service language teachers (Derwing & Munro, 2005; Macdonald, 2002), the self-reported impact of the opportunity to interact with pronunciation pedagogy is an important idea to consider. By the nature of this study design, the data also revealed future pre-service teacher goals, personal progress, and impressions which the pronunciation course and the Mentor made upon them.

Findings

The following section contains an analysis across modalities of the pre-service teacher narratives, examining in detail the themes and associated meanings which were explored in the NVivo coding process. The research question asked how language teacher preparation situated within a pronunciation course influences the pre-service teachers' perceptions towards pronunciation teaching and learning, looking to find attitudes, perceptions, and beliefs of pre-service teachers in their narrative data. The findings, once sorted into Nodes, were sorted into two main themes, each with associated meaning, as can be seen in Table 5. This parallel approach aligns with an observation noted by Derwing & Rossiter (2002), who stated that “two [factors] that specialists consider especially important are knowledge of phonology (subject matter knowledge) and knowledge of techniques and approaches for teaching pronunciation (pedagogical content knowledge)” (p. 41).

Table 5

Summary of Themes

Themes/Sub-themes	Nodes
Theoretical observations	
Segments	Perceptions of phonetics_phonology
Prosody	Perceptions of self as language learner Perceptions of phonetics_phonology
Practice-oriented observations	
Emotionality	Perceptions of students Perceptions of self as language learner
Embodiment	Impact of instructor Perception of pedagogy
Humor	Perception of pedagogy
Teacherly perspective	Impact of instructor Perception of pedagogy
Perceptions of self as teacher	Perceptions of self as teacher-learner Impact of course

As the data subsets, both written and audio, were analyzed reflexively and seen as each informing the other, the same themes were identified across modalities. As they appear in the following sections, themes are identified by modality (audio or written reflection), covering the duration of the observed pronunciation course.

Theoretical Observations

While participants Kate and Ellie, the two cases selected from the original data set, were involved in observing and assisting in this pronunciation course, there was no pre-requisite for having any pedagogical background knowledge and, therefore, no guarantee that they had received prior training in pronunciation or any related linguistic theories. The excerpts presented are therefore indiscernible as to what the participants knew prior to the practicum and what they learned in-action in the pronunciation course. The theme of Theoretical Observations was further defined in terms of two sub-themes which pervaded the narrative data: Segments and Prosody.

Segments

In the accumulation of the data, excerpts relating to segments seemed to relate to either the participant's metalinguistic knowledge of phonetics or their individualized foreign language learning experiences. Both Kate and Ellie demonstrated a level of phonetic awareness that seemed to be catalyzed by their own experiences as language learners. Kate, in her written reflection, mentioned that:

In the first few lessons, when [the Mentor] was doing an auditory activity with the students, it was often hard for me to hear the different sounds, but by the end, I was able to hear the sounds...after studying the Spanish language and Spanish phonetics for so long, it took me a few weeks to adjust back to the rules of English phonetics.

Later in the course, she identified particular segments which she struggled not only to explain but also to produce:

I think today's content was not difficult for me to grasp in terms of the logic behind it but listening to and watching [the Mentor] teach it was really helpful because a lot of these sounds can be hard for me to produce like the /l/ and the /ɪ/ those are things that I went to speech therapy for so hearing her say them clearly and teaching them correctly was really helpful for me because I know that sometimes I emphasize- empathize with the students a little bit with struggling with them and I then sometimes get lost in explaining them properly to them so this lesson was really helpful to me going forward knowing what to say and what to do to help them.

Here, Kate notes the impact which the articulatory distinctions between /l/ and /ɪ/ made on not just the ELs but also on herself as she identifies the liquids as two phonemes that she struggles with. Knowing that it has been in her own journey to be able to produce these segments and connecting them to her experiences in speech therapy helped her connect to empathy with ELs when struggling to produce and discriminate between these specific sounds.

Ellie also revealed a sense of phonetic awareness, citing contrastive analysis as a method for identifying potentially troublesome phonemes in the target language, saying in an audio recording, "Of course for Spanish speakers...I understand that /b/ and /v/ is a common problem

that they have but I thought it was interesting that I didn't realize that Turkish speakers had the problems with /v/ and /w/?

Going beyond just phonetic awareness, both cases also discuss certain articulatory features. It is difficult to identify if they had been previously exposed to the technical aspects of articulatory phonetics before or if they were first exposed in the course observations. In an audio reflection, Kate recalled:

We went over fricatives last time so [the Mentor] started with /ʃip/ and she would make sure they could produce that sound and then from there she would transition to /tʃip/ and she did the same thing with 'chop' and 'shop' and some other words. I think it was really good word choice to talk about how the fricative /ʃ/ has airflow whereas the affricate /tʃ/ does not I think that was a really helpful thing for the students and also it was helpful for me to hear just a way to explain that.

In Kate's case, not only the awareness in what is changing between these two phonemes was helpful but also observing the interaction of the Mentor as she explained this manner of articulation between /ʃ/ and /tʃ/ in learner-friendly language that was grounded in examples.

Prosody

In addition to segmental features of SAE, Kate and Ellie both demonstrated an awareness of prosody, that is, elements of rhythm, intonation, and stress (Baker, 2011; Celce-Murcia et. al., 2010) in the pronunciation course. In their PAE observation, it appears that the ELs' attention was drawn to connected speech and that they were encouraged to practice through listening to authentic materials and conversations around them. Ellie noted in an audio reflection:

[The Mentor] said that this is the flow of American English it's all continuous sounds rather than individual sounds...I wonder if students would be able to grasp onto the rhythm more quickly than as if they were doing individual words maybe they would be able to better get that rhythm. Something else was how you know when we you know we connect sounds...for example like they said "he speaks slowly" you know we don't say /'hi 'spiiks 'slowli/ we say ['hispiks ,lowli] so it becomes almost one word I think it's really good that the students were able to catch that as well.

Kate also noticed this emphasis on segmental versus fluent speech, saying in an audio reflection:

I also thought it was really um helpful that [the Mentor] distinguished that we're exaggerating in here but that's not necessarily how they're going to hear people speak outside of a classroom like this because even with some of the exaggeration there were students that were struggling so to emphasize that if you're struggling now with exaggerated speech you really need to practice so that you can understand someone who's not exaggerating their words.

As indicated, both participants showed an awareness of connected speech and how the rhythm of natural speech flow changed the anticipated phonemes in multi-syllabic utterance.

Practice-oriented Observations

While the underlying theoretical concepts did impact the participants' perceptions of pronunciation teaching and learning, the subthemes in Theoretical Observations most frequently pertained to the development of conceptual knowledge (Johnson, 1996). However, strong instances in the data arose which directly pointed towards their development of perceptual

knowledge (Johnson, 1992) as well, indicating a strong trend towards noticing techniques used in the pedagogy of the pronunciation of SAE. This second theme of Practice-oriented Observations, therefore, is supported by the theoretical distinction between types of knowledge which surface in teacher learning, types of knowledge needed for pronunciation teaching specifically, and the fact that the experiences of the participants was presented as a teaching practicum experience. In this section, the ability of the participants to link the theoretical concepts to their understanding of pedagogical application fell into five subthemes: Emotionality, Embodiment, Humor, Teacherly Perspective, and Perceptions of Self as Teacher.

Emotionality

The first sub-theme in practice-oriented concepts that was salient in participant reflections of the PAE course was a vital contributor in the pronunciation classroom. The emotions of both teacher and students cannot be ignored. These invisible factors which may contribute to lack of willingness in the language classroom were noticed by both participants.

Ellie noted the struggle with the affective filter in her cumulative written reflection, saying, “[it] is difficult to elicit change in students who are resistant to trying new sounds”. She also used her own experiences as a language learner to ground empathy towards a learner’s struggle to produce unfamiliar phonetic segments. In an audio reflection, she noted:

I feel like [Student 1] had a bit of discomfort in producing sounds because it wasn’t very common to her native tongue. I also feel those problems especially when I’m saying some things in Portuguese for example I have problems saying something like ‘coração’

and so they have that very that very deep /ãw/ sound which is hard for me to pronounce so I can kind of relate to the students and their hesitation in saying some sounds.

This sense of empathizing with ELs based on personal L2 learning experiences continued across both participants' noted experiences in the pronunciation course. In her written reflection, Kate noted:

My fear of sounding 'stupid' or 'not native' has often kept me from practicing or engaging with native speakers. Watching the students in PAE fearlessly make mistakes and ask questions made me want to do better and improve my Spanish, and I had genuine empathy for them when their reticence got in the way.

In conclusion, both participants not only noticed and were empathetic to English learner sentiment related to affective filter but also acknowledged their own foreign language learning experiences as ways of noticing and understanding the barriers that their ELs were facing in production of their L2.

Embodiment

The pedagogical techniques incorporated into PAE by the Mentor became salient indicators of how both participants approached the teaching aspect of the pronunciation course. Through observation of the Mentor's techniques, Kate and Ellie both revealed a sense of appreciation for the novelty which the Mentor's teaching techniques contained. To illustrate this concept further, both participants referenced the Mentor's use of gesture for explaining articulation, with Kate indicating in an audio reflection:

[The Mentor] used a lot of different body language to show where those are located in the mouth in addition to when the students were making errors with the sound she would use a lot of different hand gestures to show them how to fix their pronunciation...I've noticed this for a couple weeks now I've noticed that when [the instructor] emphasizes something with her body language for example she'll kind of move forward or she'll move her head when they repeat the sound they do it with her and a lot of times even later on in the lesson even if she's not currently doing it in that moment they move their body language in that same way so I find it interesting the- they've almost created this muscle memory with the sound and I'm curious if that will last or if that's only in this setting where they're being asked to emphasize things a little bit more than in natural speech but I'm curious to see if they will start to associate certain body language with certain pronunciations.

Later in the course, Kate again connected this gesturing to some of the prosodic elements of pronunciation teaching, noting:

Today I noticed that [the Mentor] used her hands a lot to explain the movement of sounds for example when she was saying 'speaks slowly' she used her hands to make a wave to show that the /s/ at the end of 'speaks' should merge with the /s/ at the beginning of 'slowly' rather than making two completely isolated sounds.

While Kate seemed to interpret the gesturing incorporated by the Mentor as behaviorist, imitation-based methodology, as described by Celce-Murcia et. al. (2017), Ellie connected the gestures which were enacted by the Mentor to more purposeful pedagogy. In an audio reflection, she observed:

I also liked how [the Mentor] was using the hand gestures as a conductor for example she would say certain things and then she would move her hands in accordance like the pitch or the elongation of a sound and I think that's really powerful because it brings a visual element in order for the students to you know better produce the sounds.

By crediting the motions of the Mentor as more than just imitative structures for the ELs to follow, Ellie seemed to draw out a deeper intention that incorporating gesture provided in the observed pronunciation classroom.

Humor

Another pedagogical technique that became relevant with both participants in the pronunciation course was the incorporation of humor into the classroom. Both participants observed the presence of humor in the pronunciation classroom and reflected upon it as a positive influence. Kate connected humor as a pedagogical technique that lowered the affective filter and, therefore, connected both learner improvement and also identity in an audio reflection stating:

I love watching how comfortable the learners are with us now, with us and with [the Mentor] they feel comfortable enough to make jokes and um I think the more comfortable they get the more malleable they're going to be not only to hear the sounds and not only to hear them but to produce them I think that most of them are at a point where they're hearing the sounds but there's still that hesitance to produce the sounds whether that's an identity issue or fear of sounding weird or they just don't really know where to put their tongue but everyone seems very willing and very adaptable.

Further, Ellie expanded upon her understanding of humor and fun from the perspective of ELs throughout the duration of her reflections. For example, she noticed the use of exaggeration and humor to highlight learner awareness, saying in an audio reflection:

...when we would say different sounds in different kinds of funny ways and students would have to copy the sounds and it was really funny because it brought a different dimension you know more humor you know we're making these uncomfortable sounds but at the same time like it's okay because it's funny. So I think that's really good that the students also laughed for example when [the Mentor] said /tɪkəts/ and /ti:kəts/ you know they heard the difference in the sound and they were able to laugh about it because they knew which one was completely wrong, which one sounded ridiculous... but at the same time they're the ones making that sound...not that it sounds ridiculous for them you know of course it's an accent but it just to emphasize it I think is something that's very funny.

In another audio reflection, Ellie revealed her continued noticing of humor and laughter in the pronunciation course:

...the students they start laughing when they hear something that they know is wrong and they know they say it wrong like for example when you start saying 'money' like /mo:ni/ 'yeah money hahaha' so I thought that was really great it's great to have laughter in the classroom something that I always look for to contribute to the classroom because it's really good.

The same participant referred to laughter and humor in her summative written reflection in stating, "By lightening the atmosphere, students might feel more comfortable in adopting a new

accent”. In reflecting on humor in the language classroom, Ellie linked humor not only to fun and lightheartedness but also to relieving the affective factors which may impede production in ELs.

Teacherly Perspective

As the main role of the participants in the pronunciation course was that of observer, post-lesson audio reflections and the first written reflection prompt allowed participants an outlet for imparting their own teacherly perspectives into what they had observed each day in the class. When prompted in the written reflection to provide recommendations for the learners to further improve their pronunciation outside of the course, Ellie wrote in her written reflection:

I would recommend for the students to record themselves speaking naturally. The students had greatly progressed in being able to hear and replicate the sounds of American English. Students can produce the vowel sounds. However, they are still not applying it to their natural English speech...since they have a greater awareness of pronunciation, I hope they can apply this knowledge to further critique and correct themselves in solidifying the sounds.

Not only reflecting on a need she points out in the learners, Ellie identified her own need as a teacher in wanting to know about how to build this automaticity in learners via types of feedback. Presenting a learner-centric question to her own perspective on teaching, Ellie noted in an audio reflection:

I also think and this is something that I’ve been learning in my other classes so we want the students to be autonomous so we can get to a point where they understand their

mistakes and they can self-correct and they can fix themselves because we're not going to be there with them all the time and we want them to be using the sounds in their native – like in their natural daily life and so that's one thing that I try to do with my students in my in my group I try to have them be more autonomous so I said if I say no or I make a signal and that way you know they know that they are being corrected and that the sound is wrong and then they know the correct sound because they make the correct sound afterwards so I would also maybe like to know more about corrective feedback and pronunciation and how we can get the students to a point where they can be more independent in harnessing their own sounds.

Extending this idea of developing automaticity in the learners she concurrently taught outside of the PAE course, Ellie indicated a shift in her own teaching by the end of the course, noting in her written reflection:

Before I might have simply recast a pronunciation error, now I am much more deliberate in pointing out an error, stretching out the sounds for the student to replicate, and giving feedback in describing how the mouth and tongue should be positioned. I use this technique to help international students to whom I give corrective feedback on their writing. When two Korean students were mispronouncing book, I took a moment to separate the word into different sounds and having them repeat. I focused on the vowel sound by slowly exaggerating it. It was a short and good-humored experience, so when I meet them again, I will listen carefully to see if the small moment we shared had an impact.

Her understanding of the pedagogical techniques demonstrated in PAE became tools which she implemented in her other teaching, integrating her new teacherly knowledge beyond the pronunciation classroom. By extending her newfound techniques to other outlets of L2 instruction, Ellie realized their relevance as a teacher as well as to learners both in pronunciation-focused classrooms and integrated pronunciation teaching.

Teacher Self-perceptions

The final sub-theme in the theme Practice-oriented Observations provides an internalized view of how the participants viewed themselves as teachers, specifically situated in the pronunciation classroom. The excerpts in this sub-theme show pre-service teacher uncertainty towards teaching, even struggling at times with the pedagogical concepts presented, and the reconciliation of those techniques in their individual conclusions.

Towards the beginning of the course, uncertainty did arise from the participant reflections as to what was happening or how to engage with the pronunciation material. Early in the pronunciation course, Kate had revealed uncertainty toward the task of contrasting different manners of articulation. Building on this theme of phonetic discrimination in her summative written reflection, Kate self-diagnosed herself with improvement in the area of auditory discrimination, noting:

Being able to take part in Pronouncing American English this semester has been a very valuable experience for me. I feel like my ability to be able to hear different sounds, especially vowels, has significantly improved after observing the lessons in PAE. In the first few lessons, when [the Mentor] was doing an auditory activity with the students, it

was often hard for me to hear the different sounds, but by the end, I was able to hear the sounds and not rely on the orthography. I also feel that my ability to explain sounds has improved a lot after working with the students in small groups every week.

She continued to detail her self-perception in this dichotomous role as both a pre-service teacher and also as a facilitator of pronunciation, saying:

Something that has also been important for me to realize and grow from is that I have very high levels of empathy, and while caring about students and trying to relate to them is significant, I cannot let my empathy allow me to hinder their growth. I must simply use it to understand and keep their experience in mind as I challenge them to improve and overcome their fear. It does them no good to not be challenged. Overall, while I recognize the difference I made in PAE this semester, and I am so grateful to have had a part in helping the students, PAE has had quite an impact on me as an individual and as a teacher-in-training.

In continuing to examine the sub-theme of self-noticed progression throughout the pronunciation course, Ellie also noted a change in her approach and understanding of pronunciation teaching. Upon initial exposure to the pronunciation theories and pedagogical techniques of the pronunciation course, Ellie expressed confusion, noting in an audio reflection:

I felt like sometimes [the Mentor] says “oh, good job” but then the sound for me still sounds off and then sometimes, the sound for me sounds good and [the PAE instructor] is like “mm no not yet” and so I wonder about how I can reckon with this like how...of course maybe all teachers have different ears maybe in the long scope of things maybe

the students will be able to all come to a final American pronunciation I think that's something I definitely want to know more about.

Later in the course, she expressed her views toward pronunciation instruction when reflecting in her summative written reflection that:

My understanding of pronunciation has completely changed because of my experience in PAE. Previously, I thought pronunciation was fixed once a person had reached a certain age. However, pronunciation has to do more with listening than with developing the muscles of the mouth. Children are more likely to have native-like pronunciation as compared to adults because children are comfortable in producing new sounds.

Pronunciation is empowering since the English Learner might feel more confident in their ability and identity...PAE has increased my confidence in knowing how to approach sounds and being persistent and encouraging towards my students' abilities.

In this summative recollection of her experiences in the course, Ellie connected the imperative influence that pronunciation has on a language learner's identity and fluency. In doing so, she encompassed areas of importance both from a pedagogical and a theoretical point of view, bridging the areas of perceptual and conceptual knowledge seen in pre-service teacher programs (Johnson, 1996).

The two major themes discussed from the participant data, Theoretical Observations and Practice-oriented Observations, along with their subsequent sub-themes, reinforce the dichotomy observed in the literature between conceptual and perceptual knowledge rooted in LTE (Johnson, 1992). By linking the data to other studies and literature, the results which address the research question are grounded for extension to LTE programs and curricula.

CHAPTER FIVE: DISCUSSION AND CONCLUSION

The goals of this study, rooted in using narrative inquiry, examined the perceptions of pre-service teachers towards pronunciation teaching and learning. In analyzing the data from the participants, an imperative discussion was raised in order to address the research question. Connecting the findings to the research rooted in LTC, the goal of this study was not only to track the novel concepts observed by the participants but also to uncover areas of knowledge previously acquired by pre-service teachers and allow them to harness them in a pedagogical manner. As observed by Kubanyiova (2012), the purpose of LTC research is not only to discover new knowledge that has been acquired through teacher learning but also to unearth previously accumulated knowledge and assumptions in order to allow for mediation of pre-service teacher ideas. This framework, in turn, creates a critical space in which pre-service teacher growth and development can occur.

The connection of each theme and corresponding subthemes to the precepts of LTE is further discussed in this chapter, along with implications of the findings and a call for future research agendas. Therefore, as the narrative reflections of the present study highlighted both new and previous knowledge carried by both participants towards SAE pronunciation in particular, a foundation was also established for teacher development. In the following sections, the theoretical observations which the participants made throughout their service-learning experience were connected to concepts and pre-standing discussions which have been found in the literature.

As has been discussed in this study, findings indicated the two types of knowledges referenced by Johnson (1996) and Woods (1996): conceptual and procedural. In narrative entries

which tapped into conceptual knowledge, pre-service teachers revealed areas of pronunciation content knowledge through discussion. In perceptual knowledge, pre-service teacher observations on extending ideas from their observation into the environment of the classroom were observed. Thus, teachers demonstrated overall knowledge about teaching not only by what they knew about the content of the pronunciation course but also in what they did with the ELs.

Discussion of Theoretical Observations

In the data, the results which fell into the theme of Theoretical Observations and its associated meanings, Segments and Prosody, seem to align with the outline of conceptual knowledge described by Johnson (1996). In tracing both conceived and subconscious conceptual knowledge in pre-service teachers, insight into the content which participants were familiar with as well as content they had not yet mastered was gleaned.

Segments and Prosody

The dichotomy that exists in second language pronunciation pedagogy stems from the teaching of segments versus that of prosody. Based on the findings with regard to this dichotomy, it would seem that phonemic inventory, individual articulatory segments of a given language, was easier for pre-service teachers to grasp and reiterate throughout the course of their reflections. In general, analysis of participant data displayed an understanding of the place and manner of articulations associating with the phonemic inventory of SAE.

Contrary to segments, attention given to prosody in the participant reflections was reduced to brief mentions towards connected speech, which was explicitly highlighted by the Mentor's example of "he speaks slowly" and the fact that the material covered in the course was

“exaggerated” when compared with natural speech. The segmental focus of the course which the participants observed suggests a gap between what had been demonstrated by the ELs’ output and the way that pronunciation worked in the communities around them.

Connected speech is not an event isolated to English pronunciation; in fact, almost every language participates to some degree in this variation (Celce-Murcia et. al., 2010), resulting from what Clary and Dixon (1963) define as the “*law of economy*, whereby the organs of speech, instead of taking a new position for each sound, tend to draw sounds together with the purpose of saving time and energy” (p. 12). In lacking ability to distinguish what elements of connected speech and prosody were being referred to by the Mentor or how “non-exaggerated” speech might look, the participant reflections revealed a gap in their understanding of this content area. In order to avoid these gaps in pre-service teacher knowledge, Couper (2017) suggests that there may be a heightened demand for language teacher educators, writers of textbooks and curriculum, and TEFL/TESOL program administrators to be familiar with current research in pronunciation pedagogy and incorporate this into their materials accordingly.

The Theoretical Observations theme revealed salience in pre-service teacher understandings of phonetics and recognition of phonetics as well as noting key concepts from SLA. The expansion of pre-service teacher knowledge can be attributed to both the opportunity to observe a pronunciation course and also to the guidance of a mentor or experienced teacher figure (Johnson, 2009). Through guided exposure, pre-service teachers may be able to more confidently discuss, assess, and teach to these theoretical areas.

Discussion of Practice-Oriented Observations

In addition to the conceptual knowledge depicted in the theme Theoretical Observations, there is a strong indication of procedural knowledge throughout the Practice-oriented Observation theme. This second dominant theme is subdivided into five sub-themes: Emotionality, Embodiment, Humor, Teacherly Perspective, and Perceptions of Self as Teacher. These five sub-themes tap into the procedural knowledge of the participants from this study and connect these ideas to the literature.

Emotionality

The first subtheme that emerged within Practice-oriented Observations centered on one of the most salient topics discussed in the literature pertaining to individualized student performance in pronunciation. This theme focuses on teacher and student emotion (Golombek & Doran, 2014) and its impact on silence in the pronunciation classroom. Through the service-learning experience, participants seemed to link the struggle towards pronunciation which they perceived in the observed ELs to their own experiences in foreign language learning. The participants empathized with the ELs through their own reluctance to speak in foreign language learning experiences to the hesitation they observed in their learners, discussing identity and physiological difficulty as factors which may inhibit even the desire to try pronunciation.

Negative emotions do, in fact, contribute to the reluctance of learners to participate in pronunciation and even to a lack of output. Language teachers may be able to compensate for high levels of negative emotional reactions in learners by connecting learner experiences to their own. Jenkins (2002; 2005) proposed that monolingual, NS teachers of a language will not only

struggle to relate to their learners but may also struggle more to understand and teach their learners than a plurilingual, non-native speaker (NNS) teacher of that same language. This argument is rooted in monolingual speaker inability to develop compensatory strategies for communicative breakdowns (Jenkins, 2002). A language teacher's ability to "empathize" with ELs struggling in any area of language learning seems to be linked to their own experiences as a language learner. Through this connection, teacher training programs may consider a foreign language learning proficiency or course requirement to ensure that their teachers have some degree of experience being a language learner.

Embodiment

In accordance with what the participants observed, the gesturing of the Mentor impacted both participants' views of how to provide learners with visual tools for articulatory descriptors. The use of embodiment in the pronunciation classroom has been beneficially linked to the demonstration and production of sounds in L2 pronunciation contexts although a systematic, gesture-based pedagogy is a novel concept in the pronunciation classroom (Smotrova, 2015). The various techniques of embodiment, explanation of articulatory features, and classroom management were all discussed extensively by both participants in line with the behavior modeled to them by the Mentor.

The role of the Mentor had undoubtable impact on the participants but did not serve to provide them with experiences alone. The role of the instructor, in light of Johnson's (2009) observations, was to link "expert" or theoretical and pedagogical knowledge to the pre-existing experiences and "experiential" knowledge of the pre-service teachers. Therefore, by

understanding gesture as a tool for visualization in the pronunciation classroom, the participants externalized their understanding of how embodiment may be used as a tool for pronunciation teaching and learning.

Humor

Awareness of the affective filter was raised in Theoretical Observations, and offering a solution, humor has been shown to be a strategy employed by language learners in lowering the affective filter in the pronunciation classroom (Derwing & Rossiter, 2002; Rokoszewska, 2012). When pre-service teachers demonstrate a positive inclination for humor, they reveal potential information that might be instrumental in the development of her ideal future classroom. By harnessing a technique used by learners to lighten the atmosphere and create comfortability (Rokoszewska, 2012), teachers could engage in mediational resources in their classrooms which would perpetuate the lowering of affective factors. Observing that humor creates a warmer classroom environment may be useful in the development of language teacher identity.

Teacherly Perspective

Considering the focus on pre-service teachers in this study, the insight into how pre-service teachers think about pedagogical choices, as revealed in their narratives, may demonstrate much of their ability to rationalize decisions made in the classroom. As LTC research is rooted not just intrinsically in the teacher's inner monologue but also branches outwardly to the level of class and student impact, the pre-service teacher evaluations of the techniques involved in the PAE class proved worth consideration.

The data revealed that, while one participant was not shy to share perspectives on what was observed in the course, she never shared any personal opinion beyond agreeing with what the Mentor carried out in class. This point of interest could be attributed to a variety of differences between the participants, from those of individual personality to degree level to previous teaching experiences. According to Ellis' concept of noticing (1997), teachers may be unable to link the discrepancies to theoretical concepts or adjust their own ideas as a response to what they observed. In some pre-service teacher experiences, however, previous experience seems to make pre-service teachers more comfortable reflecting critically upon what they observed and providing recommendations or advice for improvements courses.

As LTE seeks to create teachers who can make theoretically sound judgements on the pedagogical techniques which they observe and adjust their own pedagogy accordingly, critical reflection may be an imperative tool for justifying the pedagogical choices which are either observed or enacted (Farrell, 2012; Golombek & Klager, 2015; Johnson, 2009). In fact, this guided mediation of classroom experiences and reflection provides crucial connection to bridging the gap between pre-service teacher training and first year of teaching, allowing pre-service teachers a safe space within which to make teacherly choices before being thrust into the "real world" of their own classrooms (Farrell, 2012).

Perceptions of Self as Teacher

A crucial part of pre-service teacher development is grounded in the pre-service teacher's understanding of their ideal teacher self and decision-making processes. These conceptualizations of their teacher identity may be a key factor in determining what and how

teachers make decisions in their classrooms (Duff & Uchida, 1997; Golombek & Klager, 2015; Johnson, 2009). By revealing observed behaviors which resonated with them, or conversely, left them feeling a need for more pedagogical initiative, the participants yielded insight into their personal self-efficacy. Johnson (2009) clarified this phenomenon, stating that:

As teachers begin to link this “expert” knowledge to their own “experiential” knowledge, they tend to reframe the way they describe and interpret their lived experience. These new understandings enable them to reorganize their experiential knowledge and this reorganization creates a new lens through which they interpret their understandings of themselves and their classroom practices (p. 15).

Ellie represents this by observing in her final reflection opportunities which she had had outside of the pronunciation classroom to integrate the techniques she witnessed in the pronunciation course. Her “new lens” therefore was shaped by the guided observance of the course Mentor.

Another element throughout the data that becomes evident is Thornbury’s (2005) strong emphasis on learner autonomy. This concept reveals a key moment in Ellie’s ideal teacher self-realization. She connected that neither her production and replication of target sounds nor her embodiment of gestural cues were sufficient in themselves to produce in her ELs the ability to recognize their own errors. This observation highlights an opportunity for a teacher educator or mentor to use the narrative to specialize training for this pre-service teacher specifically. Here, specific techniques and theories behind learner autonomy in the pronunciation classroom could be discussed, and an action plan could be implemented if the narrative had been used as a tool for spontaneous teacher development.

Additionally, pre-service teachers may consider the impact of observed courses largely from a content-based approach if not guided by a mentor or more experienced teacher. Participants cited newfound abilities in phonetic discrimination and that the explanations of articulatory details comprised a major role in their self-perceived abilities as a pronunciation instructor. While these pieces of knowledge are imperative to integrating pronunciation instruction, at times participants failed to link between what they had observed or learned and how that could influence how they teach in the future. The lack of reflection on perceptual notions, such as how to enact newfound pedagogical skills and ideas into personal teaching practice, may reveal yet another area where professional mediation could make a difference in the pre-service teacher pedagogical journeys.

Impact of Study

This data set revealed many different angles which may impact pre-service teacher development of pronunciation pedagogy. Each sub-theme uncovered in the data could serve as individual avenues for further research, wherein a more in-depth review of the literature of each specific content area could yield more focused approaches to pre-service teacher preparation of pronunciation teaching. Although this study focused on pre-service teachers specifically in the context of pronunciation teaching, the practice-oriented concepts which emerged may apply across various sub-fields of SLA research.

Future Research

It is the responsibility of curriculum designers, language teacher certification programs, and language teacher educators to enact change in language teacher preparation programs which

can mediate needs of future teachers with current linguistic research and methodologies. This narrative data suggests that the observation which the practicum experience provided for the pre-service teachers was not sufficient to break the traditional, engrained NS/NNS divide which is prevalent to this day in modern pronunciation classrooms, in spite of a wealth of research that argues for a revised syllabus and research agenda in pronunciation teaching (Jenkins, 2002). Future teacher educators may consider implementing concurrent research topics into pronunciation teacher instruction as well as pronunciation teaching methodologies that explore the nature of instinctive correction versus theoretically grounded calls for promoting mutual intelligibility and NNS identity.

Limitations

As this study was comprised of a secondary data set, a couple of obvious limitations must be addressed. In traditional narrative-inquiry based studies, or qualitative studies as a whole, follow-up and clarification questions may be asked of participants after the initial data collection. As the data which was released to the researcher was a secondary data set and also de-identified, contact with the participants was not available to the design of this study and therefore, the researcher was unable to clarify the original intent of the participants for some ambiguous comments or themes.

Another limitation that arose from the study design was the researcher's lack of ability to discern what theoretical or pedagogical knowledge participants had previously acquired before the beginning of the practicum. Since key tenants for understanding pronunciation are rooted in formal linguistics, pre-service teachers with little to no prior knowledge in phonetics, phonology,

and pronunciation may struggle to grasp the theory behind the techniques and associated learner outcomes which they observe in the classroom (Macdonald, 2002). Therefore, future avenues of research may want to consider a way of establishing a baseline of theoretical or pedagogical knowledge before the beginning of a practicum to track with more precision where pedagogical growth came from.

Conclusion

The present study argues that the lack of research intersecting L2 pronunciation, LTC, and LTE reveals a crucial area within language teacher training that must be better acknowledged by experienced and willing language teacher educators in order to form pre-service language teachers' professional development while still in TEFL/TESOL programs. Through multi-modal narrative inquiry, pre-service teachers revealed areas of both conceptual and perceptual knowledge (Ellis, 2006; Johnson, 1996) that should be cultivated by professional intervention in order to have salient effects on pre-service teachers (Johnson, 2009).

The data revealed confidence in describing phonetic features such as articulators, ponderings on implementation of humor and autonomy into the pronunciation classroom, noticing of pedagogical techniques implemented by the mentor, and self-determined improvement in ability to explain pronunciation to ELs. At times, the narrative inquiry left areas in which, as a secondary data set, the researcher wondered what other kinds of learning opportunities could have been presented to the participants had the narrative reflections been implemented into the practicum experience in an immediate, reactive manner. As such, the use of narratives would meet not just professional development but also personal. When treated as a

mediational tool by teacher educators, narratives can catalyze pre-service teacher learning (Johnson, 2009). According to Ball (2000):

Solving these three problems—what teachers need to know, how they have to know it, and helping them learn to use it, by grounding the problem of teachers’ content preparation in practice—could help to close the gaps that have plagued progress in teacher education. (p. 246)

By using narrative inquiry to “close the gaps” (Ball, 2000, p. 246), language teacher educators in pronunciation may be able to further mediate the spaces which leave pronunciation neglected and feared in the professional landscape.

APPENDIX A: IRB APPROVAL LETTER



UNIVERSITY OF CENTRAL FLORIDA

Institutional Review Board
FWA00000351
IRB00001138
Office of Research
12201 Research Parkway
Orlando, FL 32826-3246

EXEMPTION DETERMINATION

January 30, 2020

Dear Madelyn Diller:

On 1/30/2020, the IRB determined the following submission to be human subjects research that is exempt from regulation:

Type of Review:	Initial Study, Exempt Category
Title:	Pre-service Teacher Perceptions of Pronunciation: A Qualitative Investigation
Investigator:	Madelyn Diller
IRB ID:	STUDY00001340
Funding:	None
Grant ID:	None

This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made, and there are questions about whether these changes affect the exempt status of the human research, please contact the IRB. When you have completed your research, please submit a Study Closure request so that IRB records will be accurate.

If you have any questions, please contact the UCF IRB at 407-823-2901 or irb@ucf.edu. Please include your project title and IRB number in all correspondence with this office.

Sincerely,

Kamille Birkbeck
Designated Reviewer

APPENDIX B: DATA SHARING AGREEMENT

COLORS Repository Data-sharing Agreement

The undersigned agrees to the following conditions relative to the use of data from the COLOR Repository:

- COLOR Repository data will be used only for the study included under the IRB Approval issued by UCF.
- COLOR Repository data will not be shared with anyone not included under the IRB Approval issued by UCF.
- Any personally identifying information that may be discernable through the COLOR Repository data will not divulged.
- All steps will be take to assure the absolute protection of the identifiable information of participants.
- COLOR Repository data will not be stored in any location other that the University's secure cloud system.
- COLOR Repository data and related data links will be permanently deleted by 04/01/2025.

APPENDIX C: REPOSITORY REQUEST FORM

COLORS REPOSITORY REQUEST FORM

PART I. STUDY DETAILS - PROVIDE THE INFORMATION REQUESTED.

Study Title	Student-teacher Perceptions of Pronunciation: A Qualitative Investigation
Study Design	Qualitative: Thematic Analysis
Primary Objective	The purpose of this study is to analyze the growth in pre-service teacher cognition towards pronunciation teaching and learning through the means of pronunciation course alternation.
Secondary Objective(s)	A secondary objective for this study is to demonstrate the efficacy of the inclusion of pronunciation course content in pre-service language teacher curricula.
Study Population	UCF Students
Sample Size	5
Study Duration	01/31/2020 - 04/03/2020
Dates of Data	Fall 2019

PART II. LANGUAGE SERVICES - CHECK EACH LANGUAGE SERVICE DESIRED.

<input checked="" type="checkbox"/>	Language Services
<input type="checkbox"/>	Grammar-in-writing, traditional F2F
<input type="checkbox"/>	Grammar-in-writing, online F2F
<input type="checkbox"/>	Talking Point, traditional F2F
<input type="checkbox"/>	Talking Point, online F2F
<input type="checkbox"/>	Speaking English Grammar, online F2F
<input checked="" type="checkbox"/>	Pronouncing American English, traditional F2F
<input type="checkbox"/>	TOEFL ITP Prep, traditional F2F
<input type="checkbox"/>	TOEFL iBT Speaking/Writing Prep, online F2F
<input type="checkbox"/>	TOEIC Listening/Reading Prep, online F2F

PART III. DATA TYPES - CHECK EACH DATA TYPE DESIRED.

<input checked="" type="checkbox"/>	Type	Format	Description
<input checked="" type="checkbox"/>	Participant demographics	xls	Participant, self-reported information from Enrollment Request form (native language, current location, program of study)
<input checked="" type="checkbox"/>	Writing	doc, pdf	Participant original writing sample
<input type="checkbox"/>	Tutor notes	doc, pdf	Participant writing sample with tutor notations
<input type="checkbox"/>	Lesson	mp3, mp4	Video-recorded instructional sessions; includes screen sharing of instructor doc cam; images displayed through split-screen display; chat box intentionally omitted; occasionally muting of video for mentor-tutor interaction
<input checked="" type="checkbox"/>	Reflections	mp3	Post-instructional session, tutor audio-recording; reflects on self and participant performances
<input type="checkbox"/>	Language performance	doc, xls, pdf	Language performance measured obtained during instruction
<input type="checkbox"/>	Surveys	Xls	Data obtained before, during, and after instruction

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